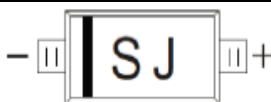


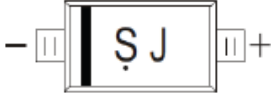
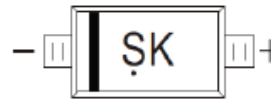



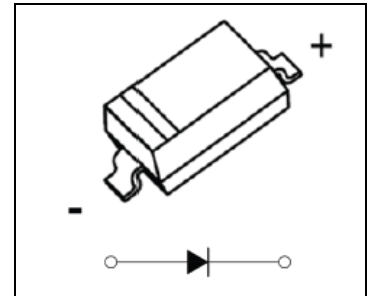
B5817W-B5819W SCHOTTKY BARRIER DIODE

Features:

- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications.

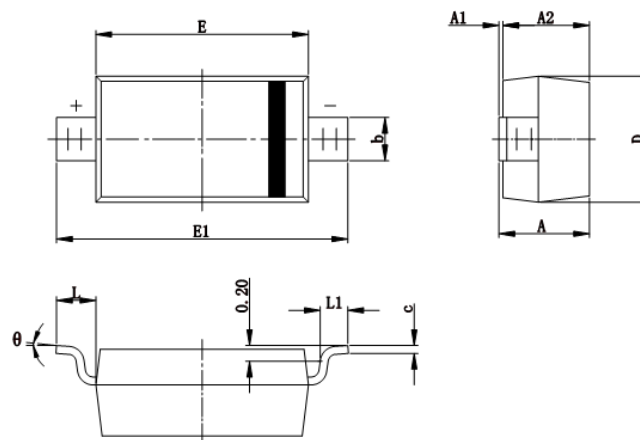
Marking:

B5817W:SJ	B5818W:SK	BB5819W:SL
		
		



The marking bar indicates the cathode
Solid dot = Green molding compound device, if none, the normal device.

Mechanical Dimensions: In mm/Inches



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0° - 8°		0° - 8°	

SOD-123

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ordering Information:

Device	Package	Shipping
B5817W-5819W	SOD-123(Pb-Free)	3000pcs / reel

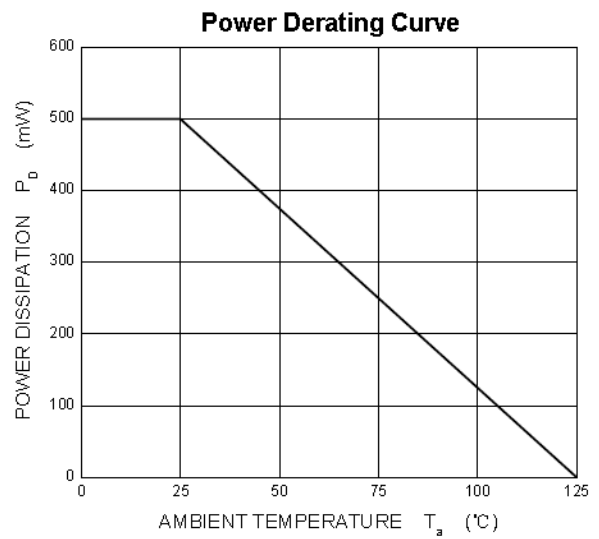
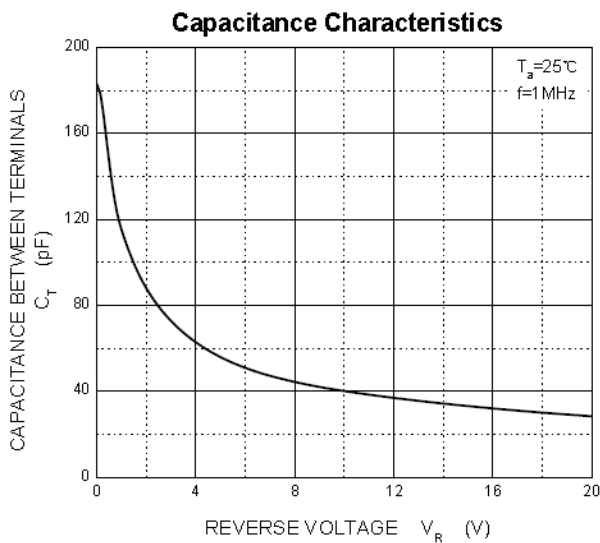
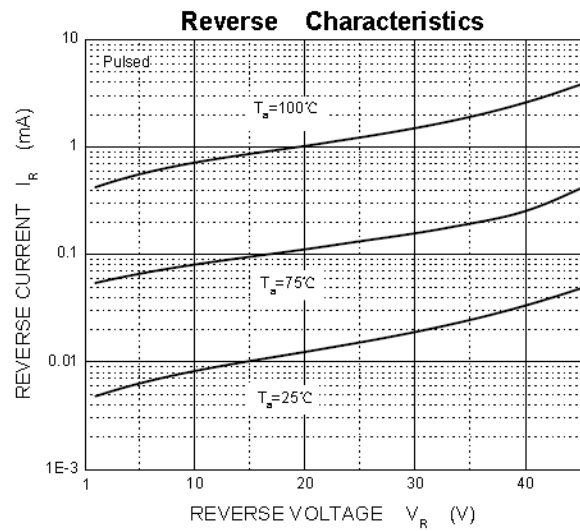
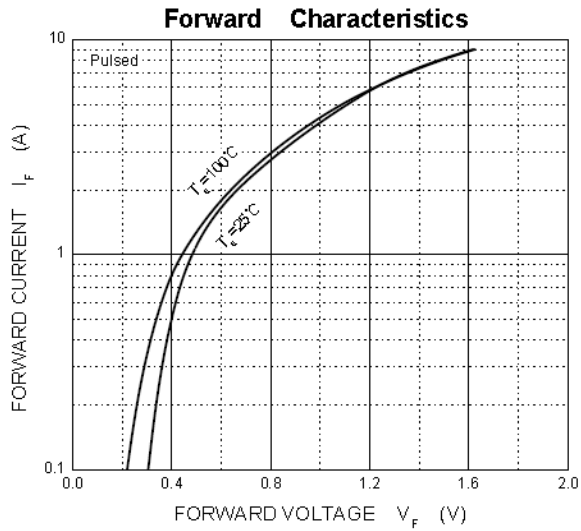
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	B5817W	B5818W	B5819W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	20	30	40	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	V
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	P_D	500			mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	200			$^{\circ}\text{C/W}$
Junction Temperature	T_j	125			$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55~+150			$^{\circ}\text{C}$

Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Unit	
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	B5817W	20	-	V
			B5818W	30	-	
			B5819W	40	-	
Reverse voltage leakage current	I_R	$V_R=20\text{V}$	B5817W	-	1	mA
		$V_R=30\text{V}$	B5818W			
		$V_R=40\text{V}$	B5819W			
Forward voltage	V_F	B5817W	$I_F=1\text{A}$	-	0.45	V
			$I_F=3\text{A}$		0.75	
		B5818W	$I_F=1\text{A}$	-	0.55	
			$I_F=3\text{A}$		0.875	
		B5819W	$I_F=1\text{A}$	-	0.60	
			$I_F=3\text{A}$		0.90	
Diode capacitance	C_D	$V_R=4\text{V}, f=1\text{MHz}$	-	120	pF	



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